

Environmental
Restoration
Contractor

ERC Team

Meeting Minutes

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SUBJECT GROUNDWATER/VADOSE ZONE INTEGRATION OPEN PROJECT MEETING -
DECEMBER 6, 1999

TO Distribution

FROM Michael J. Graham, Groundwater/Vadose Zone Integration Project Manager

DATE December 10, 1999

ATTENDEES

See Attached List

DISTRIBUTION

Attendees
GW/VZ Distribution List
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NEXT GW/VZ INTEGRATION PROJECT OPEN MEETING:

Next Meeting: Monday, January 3, 2000 – 1-3 p.m.
Location: Bechtel Hanford, Inc., Assembly Room (Badging Required)
Local Call-In Number: (509) 376-7411
Toll Free Call-In Number: (800) 664-0771

NOTE: The Open Project Meeting scheduled for December 20, 1999 has been cancelled. That decision is detailed in these minutes.

MEETING MINUTES:

A Groundwater/Vadose Zone (GW/VZ) Integration Project Open Meeting was held on December 6, 1999 in Richland, Washington, at the Bechtel Hanford, Inc. (BHI) Assembly Room.

FISCAL YEAR 2000 PROJECT SCHEDULE (Tom Wintczak):

Stakeholders have commented that these meetings could benefit from more structure. It was suggested that we status a schedule. We've handed out a draft Integration Project Summary Schedule for the current fiscal year (FY00). We still need to clean it up a bit more. The purpose is to show the major deliverables in the near-term so that we can routinely discuss or status those products in this meeting. We'll make sure to identify products out for public review and show the review period. This schedule is drawn from our Detailed Work Plan (DWP), and the timing might be a little off. (To obtain a copy of this schedule, contact Gary Jewell at 509-372-9192 or by e-mail at gajewell@bhi-erc.com.)

QUESTION: Can you walk through an example?

ANSWER: No problem. Let's go ahead and look at the System Assessment Capability (SAC) portion. It's been broken out to show the major deliverables. The SAC Rev. 0 Design Report is the next deliverable on the schedule. It's a follow up to the Preliminary SAC Concepts for Architecture, Platform, and Data Management document that was released at the end of September. The design document should be through the internal and Department of Energy

(DOE) reviews around mid-April and go out for public review at that time. Other deliverables identified for the SAC in the schedule are the Interim Risk Characterization Report, the Draft SAC Rev. 1 Requirements, and the Assemble Capability Report. The Risk Report and Rev. 1 Requirements documents will have public review in the June timeframe. The Capability Report will just be a letter report stating that the ability has been assembled. That will come out just before the end of FY00, and we don't anticipate a public review for that.

COMMENT: I (Dirk Dunning) take it that this schedule was not faxed out with the rest of the meeting materials.

RESPONSE: No. It was something that was handed out as a supplement to the agenda package. We'll make sure you get a hard copy. It's an attempt at providing a summary schedule for FY00 to use as a basis for discussion during these meetings and to take a look at upcoming deliverables.

COMMENT: How can you use it as a basis for the meeting if you're not going to distribute it? Handouts leave people like myself [that participate telephonically] at a disadvantage. It just goes back to consideration of stakeholder views.

RESPONSE: Handing out the schedule was something that came up in a meeting this morning. We thought that, even though it's still rough, it wouldn't hurt to go ahead and give people a look at it today. It's on an 11"x17" sheet of paper and can't be faxed. We'll make sure to get it on a smaller page or a couple of smaller pages so we can fax it next time, and we'll get you a copy of what was handed out today.

COMMENT: It's a little nit-picky, but what I (Marty Bensky) was asking for was not necessarily a schedule, but rather a logic diagram. From there transform the logic into a schedule so you can see a nice progression and the logic of what's going on. The logic isn't included with this schedule, but this is a start. I just want to see the logic first.

RESPONSE: We'll try to get that in place for next time.

DECEMBER 20 AND JANUARY 3 OPEN PROJECT TEAM MEETINGS (Dru Butler):

The next couple of Open Project Team Meetings are scheduled close to holidays on December 20 and January 3. We wanted to ask you (the stakeholders, regulators, and Tribal Nations) if we should go forward with both of them, or if we should call one of them off. I know that there are a lot of people planning to take off before Christmas due to the short week and I'd like to propose canceling the December 20 meeting and reconvening on January 3. However, we can go ahead and have both meetings if there is enough interest.

COMMENT: Go ahead and cancel the December 20 meeting.

COMMENT: There is an all-day meeting on December 15 for the SAC and Regulatory Path Forward Workgroups. A lot of people are planning on attending those. We can probably live without another meeting less than a week after that. Cancel the December 20 meeting.

INTEGRATION PROJECT MEETINGS WITH SENATOR WYDEN STAFF (Mike Thompson):

The Integration Project has been directed to put out a report to Congress twice annually. This came as a direct result of a request from Senator Wyden of Oregon. We produced the first of those reports in August. Following that report, Senator Wyden's office had comments that the report didn't address the General Accounting Office (GAO) Report of March 1998 entitled "Understanding of Waste Migration at Hanford is Inadequate for Key Decisions." We are currently preparing a second report that includes a section to address the issues and recommendations from the GAO report.

We sent a draft of the report back to D.C. just before Thanksgiving. It made its rounds through DOE Headquarters (DOE-HQ) and Senator Wyden's office. We went to D.C. last week and sat down with staff from Wyden's office to discuss it. Surprisingly, the conversations didn't center on the GAO report, although the feedback on that was positive. Wyden's staff had questions about the progress of the Integration Project in general and our ability to make a cumulative impact assessment, versus the need to go out and collect more data. In total the meeting lasted about 2 hours. The comments we received from Wyden's staff and DOE-HQ were relatively minor. We hope to get a final version out shortly.

QUESTION: When do you think the report will be ready for release?

ANSWER: We're going to try to have it out by the end of the calendar year or shortly thereafter. There aren't going to be any major changes of the draft. Most of the changes will clarify the points made, and maps and photographs will be added.

VADOSE ZONE CODE CRITERIA DOCUMENT (Tony Knepp):

I wanted to give a status of where we are with the Vadose Zone Code Selection Criteria document (Computer Code Selection Criteria for Flow Transport Code(s) to be used in Vadose Zone Calculations for Environmental Analyses in the Hanford Site's Central Plateau). It went through a brief comment period, and a number of people submitted comments. Those comments were addressed and the document was published. We've now sent out a solicitation of interest to 26 different companies, and plan to send to a few more as they are identified. We should start to see things back in about 30 days, and we should start making some selections in February.

QUESTION: What have you done with my (Dirk Dunning) comments?

ANSWER: Your comments will be addressed and incorporated during the selection process. One concern we had was that if we rescinded the solicitation of interest at this point, it would cause potential vendors to go through a double comparison and might reduce the number of competitors.

QUESTION: How would they be doing a double comparison if you rescinded the first solicitation?

RESPONSE: We just didn't feel that things would change that dramatically in order to justify rescinding the solicitation.

COMMENT: Some of my input called for substantial changes. Are you just going to dismiss the stamp of a professional engineer?

RESPONSE: I (Tony Knepp) am also a professional engineer, but that is beside the point. This isn't the selection process. It's just a solicitation of interest.

COMMENT: Down the road during the RI/FS process, if you're using this model to address risk then it will put the process in serious question.

RESPONSE: We understand your position.

COMMENT: Using a multi-zone soil distribution coefficient has no basis in reality.

RESPONSE: We asked for models that include the ability to simulate transport of contaminants in the soil. We know there's a lot of research and development going on with this.

RESPONSE: It could kill the entire project if not based in reality.

QUESTION: Is this really the proper forum to discuss this?

ANSWER: Yes, it is. Shut up. Let the Project respond.

COMMENT: You need to be looking at things in relation to the final analysis. The first run will be a relatively simplistic analysis. As decisions and data mature, it will get more specific. All of the codes are changeable. Nothing is fixed.

COMMENT: One commentator even asked why this process was being undertaken at all since there are already criteria existing. Similar criteria selections have taken place in the past few years. He considered this all a duplication of effort and wanted to know why all this was being done in the first place. The reason is that between then and now codes have become more sophisticated, and we want to make sure that we are utilizing the technologies that exist.

200 AREA ENVIRONMENTAL RESTORATION UPDATE (Tom Wintczak):

The public review draft of the 200-CS-1 Operable Unit RI/FS Work Plan has been given to the DOE Richland Operations Office (DOE-RL). It will be going out for its public comment period next week (December 13).

We're completing the vadose sampling of the S-Pond borehole. They should be down to about 190 to 200 feet right now and hitting groundwater shortly. This is a dual purpose well that covers requirements for both the Resource Conservation Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

We also initiated borehole drilling at Gable Mountain Pond. The drilling bottomed out at 37 feet when they hit a layer of basalt.

QUESTION: What were the findings?

ANSWER: That's not known yet. The work was just completed.

SCIENCE AND TECHNOLOGY UPDATE (Mark Freshley):

Staffing Changes

Some of you don't know yet, but Terri Stewart has stepped aside as the Integration Project Science and Technology (S&T) lead in order to return to her dissertation. She's done everything but write her doctoral thesis for her Ph.D. She's going to be immersing herself in that task and will be gone for about six months. Terri served two roles on the Integration Project. The first was the lead for the S&T task, and I will assume that role. I'll be overseeing all of the work being done on site for S&T.

The second role Terri filled was the Integration Task Lead for Pacific Northwest National Laboratories (PNNL) on the Integration Project. Terri was superhuman and could do both tasks, but the rest of us aren't, so we decided to divide the responsibilities. PNNL's Project Lead will now be Gary McNair. He's been with Battelle for quite a while, and he has experience in projects similar to this. He helped with the review of the Integration Project DWP this year, so he's somewhat familiar with the Project.

I'll also be relying heavily on John Zachara as the PNNL Lead Scientist. John will help through the technical work and be the lead for things like the upcoming National Academy of Sciences (NAS) review.

As for me, I've been engaged with the Integration Project since its inception, and I'm looking forward to my new role. I've been managing the PNNL Hydrology Group, and I'm in the process of transferring my responsibilities there to be able to focus full time here.

COMMENT: I (Marty Bensky) have a small complaint. Up to now, there has been too much focus on hydrology. There hasn't been enough focus on the front and back ends; degradation of barriers at the front end and dose response at the other end. That's something you need to be conscious of and do something about.

RESPONSE: We are also active in inventory and geochemistry. John Zachara leads the geochemistry effort. Terri Stewart's didn't have a hydrologic background. Her background is chemical. My (Mark Freshley) background just happens to be hydrologic.

RESPONSE: I'd recommend looking at the proposals for the work funded by the Environmental Management Science Program (EMSP). If you look at the S&T work being done there, you'll see that the vast amount of the work is not focused on hydrology.

QUESTION: What about container degradation and dose?

RESPONSE: Risk is one of our main focuses. It's an area we've been going through in workshops with the National Labs over the past year or so. We've kept this an open process and involved experts from the Center for Risk Excellence out of Chicago and various universities. They're adding chunks to the S&T Roadmap and capturing needs for the S&T program.

COMMENT: I (Marty Bensky) just brought up the point as a consciousness raiser. We hear every meeting about this borehole or that, but we're not hearing about things like low dose response. I just think that something about the status of that is more important than hearing about boreholes. It's not being covered.

COMMENT: In relation to container degradation though, it's not something that's within the Integration Project scope. Right now we rely on the core projects for that information.

COMMENT: Looking at the milestones on the schedule for S&T, I don't see anything for the risk work.

RESPONSE: That's because things with risk are still in the relatively early stages. It'll be captured from the workshops and get into the S&T Roadmap. That will help identify future risk milestones.

EMSP Principle Investigator Orientation Meeting

We held an orientation meeting in November for the EMSP Principle Investigators for the work awarded in September. There was very good participation from all across the country, as well as excellent participation from core projects staff. We had a good exchange with the researchers to see how we might integrate what they're doing into our Project Schedule. It was an exchange of ideas. We have to decide how to take what they're doing and make it relevant to us. There's some funding from DOE-HQ to try to make that happen. Since we can't stop everything midstream, we'll have to figure out how to find intersects on the fly.

We're trying to arrange an Advanced Characterization Workshop as a follow-up. It's tentatively scheduled for January 19-21. This workshop would be to further explore the EMSP and other technologies that could participate with our plans for the vadose zone, like tracer testing at Hanford.

NAS Review of S&T

Something else we wanted to update you on is that there will be a review of the S&T component of the Integration Project done by the NAS. I believe it will be a fifteen-member panel. The first meeting will be mainly for orientation purposes, and we hope to hold that in early February in Washington D.C. They would then come out later in the spring for a more detailed meeting. They'll set the schedule at the first meeting.

SAC WORK GROUP MEETING (Bob Bryce):

An agenda is attached for the SAC Work Group meeting planned for December 15 (Attachment 1). We're holding the SAC meeting in the morning, and Moses [Jarayssi] is holding his Regulatory Path Forward Work Group meeting that afternoon. The idea is to save people participating in both groups an extra trip.

Over the last year, we've been collecting issue forms at the meetings. Whenever someone had an issue, they filled out one of these forms, and we've compiled all of those into a spreadsheet. The purpose of the meeting on December 15 is to identify those issues that can be addressed in FY00 and discuss their priority. We'll also talk about the broader process for Integration Project issue resolution. The SAC will be identified and captured in the broader Integration Project issue resolution system. I believe there have been 78 issues captured from the SAC Work Group meetings. We'll hand those out at the meeting. If you'd like a copy before the meeting please let me know. (Contact Bob Bryce at 509-372-9443 or rw.bryce@pnl.gov to obtain a copy of the issues list.)

QUESTION: How do you plan to resolve issues in a timely manner? You say you'll identify the things to address throughout this fiscal year, but in the meantime you'll be going full steam ahead.

ANSWER: Some of the issues are already being addressed through the EMSP proposals. Some are covered by that part of the S&T workplan, but others aren't. In some cases we're going to have to move forward without a resolution to the issue or make simplified assumptions in the interim. That's something we'll address at the December 15 meeting. We need to identify which things we need now and which are of lower priority in terms of when the issue needs to be addressed by and what the potential impacts might be if it isn't addressed.

COMMENT: That's a concern with Integration Project direction. If some of these critical paths are left unaddressed, then all credibility goes away. Down the road, the entire project will have no value at all.

RESPONSE: We'll look at that on December 15. We'll see where these things plug-in. None of the issues are showstoppers that would keep us from moving forward in the near-term. Certainly some of the issues apply to reducing uncertainty in the assessment outcome, and others would help us to have a higher confidence in the outcome, but we'll discuss those. Some of the issues are just not easily resolved, and we will discuss those too.

RICHLAND TRITIUM SAMPLING RESULTS (Mike Thompson):

The City of Richland withdraws water from the Columbia River for their water supply. They also pump river water to recharge ponds that feed a mound, from which the city withdraws water during periods when the primary supply system is down. The city recharges at least two times the withdrawal rate to assure that river water, filtered through the soil, is withdrawn, and not groundwater.

Some sampling early last year around the area of the recharge mound returned some intriguing numbers. The sampling identified three areas of higher than expected tritium levels. Columbia River water typically runs between approximately 50 and 160 picocuries/liter (pCi/l) of tritium. It follows that the mound created by the pumping of water from the Columbia River would return similar numbers. Three of the sampling wells returned numbers of 242, 294, and 370 pCi/l. This captured our interest, so in September we went back out and resampled.

When we resampled the wells that returned the high levels, the levels did actually come back within the bounds of the river water. We increased the sampling points though, and found one reading of 516 pCi/l which captured our interest again. Sampling with a different technique returned a reading of 438 pCi/l of tritium. This also falls within the area of the mound that Richland draws drinking water from. We're working with the City of Richland and the Washington State Department of Health to resolve what the data means. Keep in mind that even the highest levels of tritium we found fall about 40 times below drinking water standards, but this situation is interesting and we want to know what the conceptual model might be that's causing the readings. We're currently increasing the samples taken.

PUBLIC INVOLVEMENT UPDATE (Dru Butler):

Semi-Annual Report

We've already talked a little bit about the Semi-Annual Report. The version we're working on now covers FY99 and is current through November. We should have it finalized and out in the next few weeks.

The report that was delivered to Congress in August is available on our Project website (<http://www.bhi-erc.com/vadose>). We've recently converted the report over so that it's viewable directly from the web. The printable version of the report is still available for those that want to take the time to download it. The report is located in the General Information section of the site.

Keith Klein Letter to CRCIA Team

Attached to the agenda package is a copy of a letter from Keith Klein to the Columbia River Comprehensive Impact Assessment (CRCIA) team as a follow up to the CRCIA Workshop on October 12. We're hoping that most of you have already seen this. I talked to Steve Sautter this morning, and he informed me that neither he nor Dirk Dunning from the Oregon Office of Energy had received it as of Friday. We did call the other two main addressees, and they confirmed they had received it. All of the meeting attendees were included in the distribution as well. (To obtain a copy of this letter, contact Gary Jewell at 509-372-9192 or by e-mail at gajewell@bhi-erc.com.)

There are two follow-on actions listed in the letter. The first is a joint SAC/CRCIA workshop sometime in the near-term to reconcile the SAC iterative approach and some of the CRCIA technical principles. This isn't scheduled yet. I hope we can arrange to conduct this around mid-January.

The second action is a proposal to have DOE work with the regulators about putting all or part of the Integration Project within the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement). In a lot of ways this would also help solve the process problems for document review.

COMMENT: In the first paragraph of the letter there's a sentence that says, "I am committed to ensuring that your views are incorporated in the execution of the GW/VZ Integration Project." Is that really a good choice of words? It could possibly be interpreted as a DOE commitment that whatever CRCIA says goes. Saying that their views would be "considered" would be preferable to saying that they would be "incorporated."

RESPONSE: That's a valid comment.

QUESTION: I (Dave Holland) noticed the emphasis was on conducting a technical workshop. Would the workshop be limited to technical issues, or would process issues be part of that as well?

ANSWER: The reason that a discussion of process issues wasn't mentioned for the next workshop is that process was the focus of the October 12 workshop. I'm sure things could be inclusive. Technical issues were put aside for the October 12 meeting. I don't think that process issues would necessarily be excluded in the upcoming meeting, but it needs to have a technical focus.

COMMENT: It would be a mistake to go back and discuss political kinds of things. It's time to move forward and solidify understanding of the technical issues.

COMMENT: The intent from this point is to get a date scheduled and an agenda together by working with the CRCIA Team. Getting things laid out in advance should help to make it an effective meeting.

QUESTION: [addressed to Dirk Dunning] Are you going to submit a response to the letter, or will you just be coming to the meeting in January with your response?

ANSWER: I imagine I'll do both. I'm not really sure at this point since I just got the letter. I've been reading through it during this meeting, and I'm only about halfway through it.

REGULATORY PATH FORWARD WORK GROUP UPDATE (Moses Jarayssi):

We've had two workshops so far on our first waste grouping, which is 100 Area groundwater. The first workshop was a briefing for all the members of the work group, including stakeholders. The second workshop was between the regulators, DOE-RL, and the contractors. It was a sub-group of the full working group. It was to talk about the processes and regulatory requirements and how they fit together in the overall picture for 100 Area groundwater cleanup. There were some very interesting discussions. We talked about the current status of 100 Area groundwater cleanup. We discussed current decisions, including Interim Records of Decision (RODs), and the techniques being used in the field right now. We talked about the key decisions that need to be made between now and the completion of cleanup and about the links between the projects that are working on this.

It was obvious during the discussions that a strategy was emerging for cleanup of the 100 Area groundwater. Having the core staff there was really beneficial. We identified some knowledge gaps that preclude us from making further decisions on moving forward. For example, we need a better understanding of contaminant impacts on aquatic receptors. It's hard to say how clean is clean if we don't know for sure the effects of the contamination. We found that studies are in the Interim RODs as requirements, but we're not doing them yet.

QUESTION: It's already a requirement to do these studies?

ANSWER: Yes. Another requirement is to review the techniques for taking care of strontium and chromium within four years. There are existing constraints on groundwater cleanup. We also discussed land use and future land use and how it effects decisions about cleanup standards.

The next Regulatory Path Forward Work Group meeting will be the afternoon of December 15. A draft agenda has been attached (Attachment 2). We'll bring the full group back together and try to find some common ground so that the work group can send out some recommendations. We'll highlight gaps and key decisions that need to be made. We'll send these recommendations out to the SAC and other end users to come up with a strategy.

QUESTION: Who are the attendees for this meeting?

ANSWER: This meeting is for the full working group. It's an open meeting. We'd like to encourage anyone interested to attend and place their concerns on the table.

UPCOMING EVENTS AND OPPORTUNITIES FOR PARTICIPATION:

See attached calendar (Attachment 3).

NOTES:

GW/VZ Web Site location: <http://www.bhi-erc.com/vadose>

If you have questions or comments please contact Dru Butler (509-375-4669), Gary Jewell (509-372-9192), or Karen Strickland (509-372-9236)

ATTACHMENTS:

- 1) December 15 SAC Work Group Meeting Agenda
- 2) December 15 Regulatory Path Forward Work Group Meeting Agenda
- 3) GW/VZ Integration Project Two Month Look Ahead Calendar

ATTENDEES:

Marty Bensky – Tri-Cities Caucus
Marcel Bergeron – PNNL
Bob Bryce – PNNL
Dru Butler – BHI
Dirk Dunning – OOOE
Mark Freshley – PNNL
Dib Goswami – Ecology
Michael Graham – BHI
Jim Hanson – DOE-RL
Mary Harmon – DOE-HQ
Doug Hildebrand – DOE-RL
Dave Holland – Ecology

Mike Hughes – BHI
Kathy Huss – SAIC
Moses Jarayssi – BHI
Gary Jewell – BHI
Tony Knepp – RPP
Fred Mann – FDNW
David Olson – DOE-RL
Gordon Rogers – Tri-Cities Caucus
Mike Thompson – DOE-RL
Tom Wintczak – BHI

ATTACHMENT 1

**SYSTEM ASSESSMENT CAPABILITY WORK GROUP MEETING
SAC Issues Prioritization**

**December 15, 1999
3350 George Washington Way, Richland Washington**

- OBJECTIVE -

Review technical issues raised during FY 99 SAC Workgroup meetings. Obtain regulator, Tribal Nation and stakeholder comments on prioritization and consolidation of these issues for resolution during FY 2000.

- BACKGROUND -

The technical issues to be discussed at this meeting are those that were collected on the Issue Forms during FY 99 SAC Workgroup meetings. There are 73 issues, some relate to Workgroup operation, some of the technical issues are similar and can be aggregated for resolution.

- AGENDA -

Introduction /Purpose of the Meeting	9:00 to 9:10
Ground rules/Group processes	9:10 to 9:20
Review and discussion of all issues raised by Workgroup	9:20 to 9:50
Break 9:50 to 10:00	
Recommended technical issues for resolution	10:00 to 10:50
SAC classification of issues	
Basis for SAC short list	
Criteria matrix for short list	
Discussion and comment	10:50 to 11:40
Validation of short list	
Overall prioritization	
Prioritization for SAC resolution	
VZ/GW Process for Tracking and Resolving Issues	11:40 to 11:50
Closing Discussion, Next Steps	11:50 to 12:00

ATTACHMENT 2

**GW/VZ Integration Project Regulatory Path Forward Work Group
December 15, 1999 Meeting
BHI, 3350 GWW, Richland – Conference Room 1B-40**

AGENDA

100 AREA GROUNDWATER WASTE GROUP

Introductions and Agenda Review	A. Willis (Dee)	1:00 PM	1:20 PM
<ul style="list-style-type: none"> • Introduction of attendees • Review agenda items 			
Status Working Group Progress:	M. Jarayssi	1:20 PM	1:35 PM
<ul style="list-style-type: none"> • Process review • 100 Area GW Report • Next Waste Group, 100 Area Source Units Cleanup 			
Stewardship & Institutional Controls:	B. Harper	1:35 PM	2:00 PM
<ul style="list-style-type: none"> • General overview of Stewardship • Update on latest national efforts • Relationship to the Hanford Cleanup 	S. Harris		
Report on Regulatory Integration Workshop:	M. Jarayssi	2:00 PM	2:20 PM
<ul style="list-style-type: none"> • November workshop. • Key Decisions discussed • Integration and overlap issues • End-Point options • Major over-riding issues listed • Bounding Case Analysis 	Janet Baden		
BREAK		2:20 PM	2:30 PM
Open Discussion:	A. Willis (Dee)	2:30 PM	3:15 PM
<ul style="list-style-type: none"> • Questions that need to be noted & answered • Reactions to over-riding issues 			
Closing Remarks on 100 Area Groundwater Cleanup	A. Willis (Dee)	3:15 PM	4:00 PM
<ul style="list-style-type: none"> • Stakeholders' recommended action • Tribal recommended action • Regulators' recommended action • DOE's recommended action • Contractor recommended action 			

ATTACHMENT 3

GW/VZ INTEGRATION PROJECT
DECEMBER 15, 1999 – FEBRUARY 7, 2000
TWO MONTH LOOK AHEAD CALENDAR

December 15	GW/VZ System Assessment Capability Work Group – Review and discussion of issues raised during SAC Workgroup meetings BHI Room 1B40 – 9 a.m.-12 p.m. (Contact: Bob Bryce)
December 15	GW/VZ Regulatory Path Forward Work Group – Review of 100 Area Groundwater Waste Group BHI Room 1B40 – 1-4 p.m. (Contact: Moses Jarayssi)
December 20	CANCELED: GW/VZ Open Project Team Meeting BHI Assembly Room – 1-3 p.m. (Contact: Dru Butler)
January 3	GW/VZ Open Project Team Meeting BHI Assembly Room – 1-3 p.m. (Contact: Dru Butler)
January 17	GW/VZ Open Project Team Meeting BHI Assembly Room – 1-3 p.m. (Contact: Dru Butler)
January 19-21	<i>Vadose Zone Advanced Characterization Workshop (tentative)</i>
January 26-28	GW/VZ Integration Project Expert Panel (IPEP) Meeting BHI Assembly Room (Contact: Virginia Rohay)
February 2-3	Hanford Advisory Board Meeting Portland – Doubletree Lloyd Center
February 7	GW/VZ Open Project Team Meeting BHI Assembly Room – 1-3 p.m. (Contact: Dru Butler)

Public Comment Periods

December 13, 1999 – January 14, 2000

200-CS-1 Operable Unit RI/FS Work Plan and RCRA TSD Unit Sampling Plan (DOE/RL-99-44, Draft B)